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FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER
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DICKERSON, CHAD S

ART UNIT	PAPER NUMBER
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10/29/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/601,679		KUROTSU, NORIYOSHI	
	<b>Examiner</b>		<b>Art Unit</b>	
	CHAD DICKERSON		2625	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 July 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 18-33 have been considered but are moot in view of the new ground(s) of rejection. The amendment to the claims necessitated the new grounds of rejection. However, the references of Motamed '969, Gassho '626 and Abe '792 are still applied to the claims. In the response to the rejection, the Applicant asserted that the combination of the three references would not have led to an apparatus having the features claimed in independent claim 18. The Examiner disagrees with this assertion.

When viewing the previously applied references, all three references have in common the feature of having a client computer send printing information to a printing device through a connected network. Motamed and Gassho both contain the feature of having an alternative printer perform a print job once an error occurs in the current printer designated to perform outputting of a job. The function of Motamed includes having jobs with different priorities (i.e. col. 4, ln 55 – col. 5, ln 16). Gassho also has jobs with different priorities as well, but the jobs are transferred from one print job queue of a printer to another. The jobs transferred to another queue can have a higher priority than another job, but it is not specifically mentioned that job priority is changed to a higher priority. The Examiner has reviewed the reference of Abe and still believes that the reference of Abe discloses the feature of having a job changed to a higher priority than another job, if the moved job has an earlier reception time than the other job. Shown in Abe, column 10, lines 64-67, the processing of jobs is based on jobs stored in

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the system and their reception times. Here, the Examiner reasoned that since the Motamed and Gassho references contain the main features of executing jobs with priority and detecting errors in the system and rerouting a job accordingly, the only features left to cover were the changing of a job's priority while it was being moved depending on the reception time of the job. Abe is used to disclose processing of a job based on the reception time in which a job with an earlier reception time was given a higher priority of another job that was also stored in the system on a respective queue. However, the Examiner noted that the changing of the priority of a job was more specifically disclosed in the reference of Kang '993. In the newly introduced reference of Kang, the reference discloses not only moving a job from one queue to another, but it also discloses moving the print job priority in the moved job to a higher priority (see paragraphs [0030]-[0037]). With the addition of the Kang reference, the feature regarding changing the priority of a moved job is performed.

The Examiner also noted the Amendment to the claims and found the features taught by the reference of Gassho in the newly applied reference of Kageyama '757, which also includes the new claim features introduced to the independent claims. The Examiner is applying the newly found reference in the independent claims while still using the Gassho reference in some of the dependent claims below. Therefore, the Examiner believes that the combination of the above references disclose the claim limitations below.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 18-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motamed '969 (USP 7081969) in view of Kang '993 (US Pub 2003/0160993), Kageyama '757 (USP 5625757) and Abe '792 (USP 6894792).

Re claim 18: Motamed '969 discloses a print control apparatus comprising:

an executing unit adapted to execute printing of a job having a first priority in preference to another job having a second priority that is lower than the first priority (**i.e. in Motamed '969, priority printing allows for certain jobs to be placed at a higher priority than others and also allows for those higher priority jobs to be printed before the other jobs. A job having a fastest setting, considered as a job with a first priority, is placed on top of the queue of a printer and printed before a job set as a background job, analogous to a job with a second or lower priority; see figs. 1-4; col. 4, lines 55-67 and col. 5, lines 1-15); and**

**when an error is detected in the first printer (i.e. in column 3, the system discloses errors occurring in the printers involved in printing. When the system detects that the first printer used is in an error state, the job can be rerouted to another printer; see col. 3, ln 35-52).**

However, Motamed '969 fails to teach a group printer driver adapted to process data provided by an application; a despooler adapted to receive the data processed by said group printer driver and transfer the received data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer; a first queue adapted to store, as a job, PDL data generated by the first PDL driver, said first queue being provided for the first printer; a second queue adapted to store, as a job, PDL data generated by the second PDL driver, said second queue being provided for the second printer; a proxy processing unit adapted to move a job stored in said first queue to said second queue so as to execute proxy printing and change the moved job to have a higher priority than another job stored in said second queue, if the moved job has an earlier reception time than that other job.

However, this is well known in the art as evidenced by Kang '993. Kang '993 discloses a first queue adapted to store, as a job, PDL data generated, said first queue being provided for the first printer (**i.e. in the function of Kang, the reference is similar to the reference of Motamed in which jobs can be transferred to an alternative printer. Also, the priority of a job can be raised that is on a certain queue. However, the Kang reference discloses having a first queue that stores a job and this first queue is used to store jobs for an associated printer; see fig. 1; paragraphs [0013]-[0015] and [0048];**

a second queue adapted to store, as a job, PDL data generated, said second queue being provided for the second printer (**i.e. in the system, there is another queue for a second detected printer that can be used for printing. The second**

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**queue connected to an associated printer is used to store a print job that it receives and the associated printer prints the job; paragraphs [0013]-[0015] and [0048]);**

a proxy processing unit adapted to move a job stored in said first queue to said second queue so as to execute proxy printing **(i.e. in the system, a print job can be moved from being stored in a first queue to a second queue in order for printing to be performed on the second printer associated with the second queue; see paragraphs [0033]-[0038])** and change the moved job to have a higher priority than another job stored in said second queue **(i.e. in the system, once a job is transferred to another queue, the job can be raised to a higher priority than jobs stored on the queue that the transferred job is moved to; see paragraphs [0032]-[0038]).**

Therefore, in view of Kang '993, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of a first queue adapted to store, as a job, PDL data generated, said first queue being provided for the first printer; a second queue adapted to store, as a job, PDL data generated, said second queue being provided for the second printer; a proxy processing unit adapted to move a job stored in said first queue to said second queue so as to execute proxy printing and change the moved job to have a higher priority than another job stored in said second queue, incorporated in the device of Motamed '969, in order to move a print job from one queue to another queue (as stated in Kang '993 paragraph [0013]).

However, the references of Motamed '969 and Kang '993 specifically fail to teach a group printer driver adapted to process data provided by an application; a despooler

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adapted to receive the data processed by said group printer driver and transfer the received data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer; as a job, PDL data generated by the first PDL driver; and as a job, PDL data generated by the second PDL driver, if the moved job has an earlier reception time than that other job.

However, this is well known in the art as evidenced by Kageyama '757.

Kageyama '757 discloses a group printer driver adapted to process data provided by an application (**i.e. in the system, the Kageyama reference is similar to the references of Motamed in which it forwards a job to an alternative printer when an error occurs in a first printer (see col. 17, ln 14-24). Kageyama is also similar to the reference of Kang in the manner in which a print job is transferred from one queue to another queue that is directly associated with a connected printer (see fig. 1). However, the function of Kageyama '757 discloses a printer driver in the PC adapted to process data that is provided by an application in the PC. The data that is from the application is given to a PDL generating unit (7134) that comprises a general PDL that may not be specific to a particular printing device. The PDL generating unit is considered as a group printer driver since it processes data from an application; see col. 24, ln 36-59);**

a despooler adapted to receive the data processed by said group printer driver and transfer the received data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer (**i.e. as seen in figure 4, the print job is sent to the print server (300) where it is received and transferred to a printer**



**driver (7500) that is specific to a certain printer. As shown in the same figure, the job can be forwarded to a first or second printer driver that is able to generate a PDL specific for the associated printer. Shown in column 27, the system discloses when a job has already been generated in a PDL, but the printer needs to be produced in a format in which the printer can use for printing. The system then converts the previous PDL formatted job into another PDL that is understandable by the current printing device; see fig. 4; col. 17, ln 57 – col. 18, ln 7 and col. 27, ln 55 – col. 28, ln 16);**

**as a job, PDL data generated by the first PDL driver (i.e. in the system, the PDL drivers shown in figure 4 are used to produce a PDL that is recognizable for the printer that uses a language specific to the printer driver. If the system realizes that the job does not contain all the PDL needed to be realized by the printer, a further conversion is performed by the printer driver in the print server in order for the printer to use a current PDL to output the input data; see figs. 4, 13, 56; col. 17, ln 57 – col. 18, ln 7 and col. 27, ln 55 – col. 28, ln 16); and**

**as a job, PDL data generated by the second PDL driver (i.e. the PDL mentioned in the above claim limitation can be also generated from a second printer driver for another language for a printer to use for printing a print job; see figs. 4, 13, 56; col. 17, ln 57 – col. 18, ln 7 and col. 27, ln 55 – col. 28, ln 16).**

Therefore, in view of Kageyama '757, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of having a group printer driver adapted to process data provided by an application; a despooler adapted

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to receive the data processed by said group printer driver and transfer the received data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer; as a job, PDL data generated by the first PDL driver; and as a job, PDL data generated by the second PDL driver, incorporated in the device of Motamed '969, further modified by the features of Kang '963, in order to have a server shift a print job to a spooler for an alternative printer in accordance with an error recovery request (as stated in Kageyama '757 col. 8, ln 17-22).

However, the combination of Motamed '969 in view of Kang '993 and Kageyama '757 fail to teach to have if the moved job has an earlier reception time than that other job.

However, this is well known in the art as evidenced by Abe '792. Abe '792 discloses to have if the moved job has an earlier reception time than that other job (i.e. **the reference of Abe is similar to the reference of Motamed in which different types of jobs can be assigned a certain job priority for printing. Abe '792 is also similar to the reference of Kageyama '757 in which a host computer is used to transfer information to a server and then to a printing device. However, Abe '792 teaches that when the printing system is in non-priority mode, the processing order of print jobs is based on the reception time. With this function incorporated in the combination of Motamed, Kang and Kageyama, the invention is able to not only set a priority for a print job, but also to have the priority of a job that is moved in the previous references to be affected by the feature of the reception time mentioned in the reference of Abe; see col. 11, lines 1-40).**

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Therefore, in view of Abe '792, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of to have a higher priority than another job stored in the queue, if the moved job has an earlier reception time than that other job incorporated in the system of Motamed '969, modified by the features of Kang '993 and Kageyama '757 disclosed above, in order to determine the processing order of print jobs based on the reception time (as stated in Abe '792 col. 11, lines 1-40).

Re claim 19: The teachings of Motamed '969 in view of Kang '993, Kageyama '757 and Abe '792 are disclosed above.

Motamed '969 discloses an apparatus according to claim 18, wherein said executing unit selects, from among jobs which have not been transmitted to a print processing unit **(i.e. in Motamed '969, the print jobs that are chosen to be executed are selected from jobs that are on the print queue that have not been transmitted to the print engine for actual printing; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15)**, a job having a higher priority than others of those jobs **(i.e. in the system of Motamed '969, the system checks the print job setting to see if the priority is the fastest setting or the background setting. Based on the setting, the print job may be placed on the top of the queue for printing or remains at the current position of the print job; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15)**, reads the selected job **(i.e. the print jobs have to be read by the system in order to determine their priority and to perform the process of obtaining the print job from the print queue and to transmit the print job to the printer for printing; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5,**

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**lines 1-15), and transmits the read job to the print processing unit (i.e. once the print job is reached in the queue, the print job is sent to the printer for printing; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15).**

Re claim 20: Motamed '969 discloses a print control method carried out in a print control apparatus which comprises

said method comprising:

an executing step, of executing printing of a job having a first priority in preference to a job having a second priority that is lower than the first priority **(i.e. in Motamed '969, priority printing allows for certain jobs to be placed at a higher priority than others and also allows for those higher priority jobs to be printed before the other jobs. A job having a fastest setting, considered as a job with a first priority, is placed on top of the queue of a printer and printed before a job set as a background job, analogous to a job with a second or lower priority; see figs. 1-4; col. 4, lines 55-67 and col. 5, lines 1-15); and**

**when an error is detected in the first printer (i.e. in column 3, the system discloses errors occurring in the printers involved in printing. When the system detects that the first printer used is in an error state, the job can be rerouted to another printer; see col. 3, ln 35-52).**

However, Motamed '969 fails to teach a group printer driver which processes data provided by an application; a despooler which receives the data processed by the group printer driver and transfers the received data to a first PDL driver provided for a

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first printer or a second PDL driver provided for a second printer; a first queue which is provided for the first printer and stores, as a job, PDL data generated by the first PDL driver, and; a second queue which is provided for the first printer and stores, as a job, PDL data generated by the second PDL driver; a proxy processing step of moving a job stored in the first queue to the second queue so as to execute proxy printing and changing the moved job to have a higher priority than another job stored in the second queue, if the moved job has an earlier reception time than that other job.

However, this is well known in the art as evidenced by Kang '993. Kang '993 discloses a first queue which is provided for the first printer and stores, as a job, PDL data generated **(i.e. in the function of Kang, the reference is similar to the reference of Motamed in which jobs can be transferred to an alternative printer. Also, the priority of a job can be raised that is on a certain queue. However, the Kang reference discloses having a first queue that stores a job and this first queue is used to store jobs for an associated printer; see fig. 1; paragraphs [0013]-[0015] and [0048]); and**

a second queue which is provided for the first printer and stores, as a job, PDL data generated **(i.e. in the system, there is another queue for a second detected printer that can be used for printing. The second queue connected to an associated printer is used to store a print job that it receives and the associated printer prints the job; paragraphs [0013]-[0015] and [0048]);**

a proxy processing step of moving a job stored in the first queue to the second queue so as to execute proxy printing **(i.e. in the system, a print job can be moved**

**from being stored in a first queue to a second queue in order for printing to be performed on the second printer associated with the second queue; see paragraphs [0033]-[0038]) and changing the moved job to have a higher priority than another job stored in the second queue (i.e. in the system, once a job is transferred to another queue, the job can be raised to a higher priority than jobs stored on the queue that the transferred job is moved to; see paragraphs [0032]-[0038]).**

Therefore, in view of Kang '993, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of a first queue which is provided for the first printer and stores, as a job, PDL data generated; and a second queue which is provided for the first printer and stores, as a job, PDL data generated; a proxy processing step of moving a job stored in the first queue to the second queue so as to execute proxy printing and changing the moved job to have a higher priority than another job stored in the second queue, incorporated in the device of Motamed '969, in order to move a print job from one queue to another queue (as stated in Kang '993 paragraph [0013]).

However, the references of Motamed '969 and Kang '993 specifically fail to teach a group printer driver which processes data provided by an application; a despooler which receives the data processed by the group printer driver and transfers the received data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer; as a job, PDL data generated by the first PDL driver; and as a job, PDL data generated by the second PDL driver, if the moved job has an earlier reception time than that other job.

However, this is well known in the art as evidenced by Kageyama '757. Kageyama '757 discloses a group printer driver which processes data provided by an application (**i.e. in the system, the Kageyama reference is similar to the references of Motamed in which it forwards a job to an alternative printer when an error occurs in a first printer (see col. 17, ln 14-24). Kageyama is also similar to the reference of Kang in the manner in which a print job is transferred from one queue to another queue that is directly associated with a connected printer (see fig. 1). However, the function of Kageyama '757 discloses a printer driver in the PC adapted to process data that is provided by an application in the PC. The data that is from the application is given to a PDL generating unit (7134) that comprises a general PDL that may not be specific to a particular printing device. The PDL generating unit is considered as a group printer driver since it processes data from an application; see col. 24, ln 36-59);**

a despooler which receives the data processed by the group printer driver and transfers the received data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer (**i.e. as seen in figure 4, the print job is sent to the print server (300) where it is received and transferred to a printer driver (7500) that is specific to a certain printer. As shown in the same figure, the job can be forwarded to a first or second printer driver that is able to generate a PDL specific for the associated printer. Shown in column 27, the system discloses when a job has already been generated in a PDL, but the printer needs to be produced in a format in which the printer can use for printing. The system then**

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**converts the previous PDL formatted job into another PDL that is understandable by the current printing device; see fig. 4; col. 17, ln 57 – col. 18, ln 7 and col. 27, ln 55 – col. 28, ln 16);**

as a job, PDL data generated by the first PDL driver (i.e. in the system, the PDL drivers shown in figure 4 are used to produce a PDL that is recognizable for the printer that uses a language specific to the printer driver. If the system realizes that the job does not contain all the PDL needed to be realized by the printer, a further conversion is performed by the printer driver in the print server in order for the printer to use a current PDL to output the input data; see figs. 4, 13, 56; col. 17, ln 57 – col. 18, ln 7 and col. 27, ln 55 – col. 28, ln 16); and

as a job, PDL data generated by the second PDL driver (i.e. the PDL mentioned in the above claim limitation can be also generated from a second printer driver for another language for a printer to use for printing a print job; see figs. 4, 13, 56; col. 17, ln 57 – col. 18, ln 7 and col. 27, ln 55 – col. 28, ln 16).

Therefore, in view of Kageyama '757, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of having a group printer driver which processes data provided by an application; a despooler which receives the data processed by the group printer driver and transfers the received data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer; as a job, PDL data generated by the first PDL driver; and as a job, PDL data generated by the second PDL driver, incorporated in the device of Motamed '969, further modified by the features of Kang '963, in order to have a server shift a print job



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to a spooler for an alternative printer in accordance with an error recovery request (as stated in Kageyama '757 col. 8, ln 17-22).

However, the combination of Motamed '969 in view of Kang '993 and Kageyama '757 fail to teach to have if the moved job has an earlier reception time than that other job.

However, this is well known in the art as evidenced by Abe '792. Abe '792 discloses to have if the moved job has an earlier reception time than that other job (i.e. **the reference of Abe is similar to the reference of Motamed in which different types of jobs can be assigned a certain job priority for printing. Abe '792 is also similar to the reference of Kageyama '757 in which a host computer is used to transfer information to a server and then to a printing device. However, Abe '792 teaches that when the printing system is in non-priority mode, the processing order of print jobs is based on the reception time. With this function incorporated in the combination of Motamed, Kang and Kageyama, the invention is able to not only set a priority for a print job, but also to have the priority of a job that is moved in the previous references to be affected by the feature of the reception time mentioned in the reference of Abe; see col. 11, lines 1-40).**

Therefore, in view of Abe '792, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of to have a higher priority than another job stored in the queue, if the moved job has an earlier reception time than that other job incorporated in the system of Motamed '969, modified by the features of Kang

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'993 and Kageyama '757 disclosed above, in order to determine the processing order of print jobs based on the reception time (as stated in Abe '792 col. 11, lines 1-40).

Re claim 21: The teachings of Motamed '969 in view of Kang '993, Kageyama '757 and Abe '792 are disclosed above.

Motamed '969 discloses a method according to claim 20, wherein said executing step includes selecting, from among jobs which have not been transmitted to a print processing unit **(i.e. in Motamed '969, the print jobs that are chosen to be executed are selected from jobs that are on the print queue that have not been transmitted to the print engine for actual printing; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15)**, a job having a higher priority than others of those jobs **(i.e. in the system of Motamed '969, the system checks the print job setting to see if the priority is the fastest setting or the background setting. Based on the setting, the print job may be placed on the top of the queue for printing or remains at the current position of the print job; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15)**, reading the selected job **(i.e. the print jobs have to be read by the system in order to determine their priority and to perform the process of obtaining the print job from the print queue and to transmit the print job to the printer for printing; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15)**, and transmitting the read job to the print processing unit **(i.e. once the print job is reached in the queue, the print job is sent to the printer for printing; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15)**.

Re claim 22: Motamed '969 discloses computer readable storage medium storing a program that causes a computer to execute a print control method (see load balancing module; col. 2, lines 39-44), carried out in a print control apparatus which comprises said method comprising:

an executing step, of executing printing of a job having a first priority in preference to a job having a second priority that is lower than the first priority (**i.e. in Motamed '969, priority printing allows for certain jobs to be placed at a higher priority than others and also allows for those higher priority jobs to be printed before the other jobs. A job having a fastest setting, considered as a job with a first priority, is placed on top of the queue of a printer and printed before a job set as a background job, analogous to a job with a second or lower priority; see figs. 1-4; col. 4, lines 55-67 and col. 5, lines 1-15**)

when an error is detected in the first printer (**i.e. in column 3, the system discloses errors occurring in the printers involved in printing. When the system detects that the first printer used is in an error state, the job can be rerouted to another printer; see col. 3, ln 35-52**).

However, Motamed '969 fails to teach a group printer driver which processes data provided by an application; a despooler which receives the data processed by the group printer driver and transfers the received data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer; a first queue which is provided for the first printer and stores, as a job, PDL data generated by the first PDL driver, and; a second queue which is provided for the first printer and stores, as a job,

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PDL data generated by the second PDL driver; a proxy processing step of moving a job stored in the first queue to the second queue so as to execute proxy printing and changing the moved job to have a higher priority than another job stored in the second queue, if the moved job has an earlier reception time than that other job.

However, this is well known in the art as evidenced by Kang '993. Kang '993 discloses a first queue which is provided for the first printer and stores, as a job, PDL data generated **(i.e. in the function of Kang, the reference is similar to the reference of Motamed in which jobs can be transferred to an alternative printer. Also, the priority of a job can be raised that is on a certain queue. However, the Kang reference discloses having a first queue that stores a job and this first queue is used to store jobs for an associated printer; see fig. 1; paragraphs [0013]-[0015] and [0048]);** and

a second queue which is provided for the first printer and stores, as a job, PDL data generated **(i.e. in the system, there is another queue for a second detected printer that can be used for printing. The second queue connected to an associated printer is used to store a print job that it receives and the associated printer prints the job; paragraphs [0013]-[0015] and [0048]);**

a proxy processing step of moving a job stored in the first queue to the second queue so as to execute proxy printing **(i.e. in the system, a print job can be moved from being stored in a first queue to a second queue in order for printing to be performed on the second printer associated with the second queue; see paragraphs [0033]-[0038])** and changing the moved job to have a higher priority than

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another job stored in the second queue **(i.e. in the system, once a job is transferred to another queue, the job can be raised to a higher priority than jobs stored on the queue that the transferred job is moved to; see paragraphs [0032]-[0038]).**

Therefore, in view of Kang '993, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of a first queue which is provided for the first printer and stores, as a job, PDL data generated; and a second queue which is provided for the first printer and stores, as a job, PDL data generated; a proxy processing step of moving a job stored in the first queue to the second queue so as to execute proxy printing and changing the moved job to have a higher priority than another job stored in the second queue, incorporated in the device of Motamed '969, in order to move a print job from one queue to another queue (as stated in Kang '993 paragraph [0013]).

However, the references of Motamed '969 and Kang '993 specifically fail to teach a group printer driver which processes data provided by an application; a despooler which receives the data processed by the group printer driver and transfers the received data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer; as a job, PDL data generated by the first PDL driver; and as a job, PDL data generated by the second PDL driver, if the moved job has an earlier reception time than that other job.

However, this is well known in the art as evidenced by Kageyama '757. Kageyama '757 discloses a group printer driver which processes data provided by an application **(i.e. in the system, the Kageyama reference is similar to the references**

of Motamed in which it forwards a job to an alternative printer when an error occurs in a first printer (see col. 17, ln 14-24). Kageyama is also similar to the reference of Kang in the manner in which a print job is transferred from one queue to another queue that is directly associated with a connected printer (see fig. 1). However, the function of Kageyama '757 discloses a printer driver in the PC adapted to process data that is provided by an application in the PC. The data that is from the application is given to a PDL generating unit (7134) that comprises a general PDL that may not be specific to a particular printing device. The PDL generating unit is considered as a group printer driver since it processes data from an application; see col. 24, ln 36-59);

a despooler which receives the data processed by the group printer driver and transfers the received data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer (i.e. as seen in figure 4, the print job is sent to the print server (300) where it is received and transferred to a printer driver (7500) that is specific to a certain printer. As shown in the same figure, the job can be forwarded to a first or second printer driver that is able to generate a PDL specific for the associated printer. Shown in column 27, the system discloses when a job has already been generated in a PDL, but the printer needs to be produced in a format in which the printer can use for printing. The system then converts the previous PDL formatted job into another PDL that is understandable by the current printing device; see fig. 4; col. 17, ln 57 – col. 18, ln 7 and col. 27, ln 55 – col. 28, ln 16);

as a job, PDL data generated by the first PDL driver (**i.e. in the system, the PDL drivers shown in figure 4 are used to produce a PDL that is recognizable for the printer that uses a language specific to the printer driver. If the system realizes that the job does not contain all the PDL needed to be realized by the printer, a further conversion is performed by the printer driver in the print server in order for the printer to use a current PDL to output the input data; see figs. 4, 13, 56; col. 17, ln 57 – col. 18, ln 7 and col. 27, ln 55 – col. 28, ln 16**); and

as a job, PDL data generated by the second PDL driver (**i.e. the PDL mentioned in the above claim limitation can be also generated from a second printer driver for another language for a printer to use for printing a print job; see figs. 4, 13, 56; col. 17, ln 57 – col. 18, ln 7 and col. 27, ln 55 – col. 28, ln 16**).

Therefore, in view of Kageyama '757, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of having a group printer driver which processes data provided by an application; a despooler which receives the data processed by the group printer driver and transfers the received data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer; as a job, PDL data generated by the first PDL driver; and as a job, PDL data generated by the second PDL driver, incorporated in the device of Motamed '969, further modified by the features of Kang '963, in order to have a server shift a print job to a spooler for an alternative printer in accordance with an error recovery request (as stated in Kageyama '757 col. 8, ln 17-22).

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However, the combination of Motamed '969 in view of Kang '993 and Kageyama '757 fail to teach to have if the moved job has an earlier reception time than that other job.

However, this is well known in the art as evidenced by Abe '792. Abe '792 discloses to have if the moved job has an earlier reception time than that other job (i.e. **the reference of Abe is similar to the reference of Motamed in which different types of jobs can be assigned a certain job priority for printing. Abe '792 is also similar to the reference of Kageyama '757 in which a host computer is used to transfer information to a server and then to a printing device. However, Abe '792 teaches that when the printing system is in non-priority mode, the processing order of print jobs is based on the reception time. With this function incorporated in the combination of Motamed, Kang and Kageyama, the invention is able to not only set a priority for a print job, but also to have the priority of a job that is moved in the previous references to be affected by the feature of the reception time mentioned in the reference of Abe; see col. 11, lines 1-40).**

Therefore, in view of Abe '792, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of to have a higher priority than another job stored in the queue, if the moved job has an earlier reception time than that other job incorporated in the system of Motamed '969, modified by the features of Kang '993 and Kageyama '757 disclosed above, in order to determine the processing order of print jobs based on the reception time (as stated in Abe '792 col. 11, lines 1-40).



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Re claim 23: The teachings of Motamed '969 in view of Kang '993, Kageyama '757 and Abe '792 are disclosed above.

Motamed '969 discloses a computer-readable medium according to claim 22, wherein said executing step includes selecting, from among jobs which have not been transmitted to a print processing unit **(i.e. in Motamed '969, the print jobs that are chosen to be executed are selected from jobs that are on the print queue that have not been transmitted to the print engine for actual printing; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15)**, a job having a higher priority than others of those jobs **(i.e. in the system of Motamed '969, the system checks the print job setting to see if the priority is the fastest setting or the background setting. Based on the setting, the print job may be placed on the top of the queue for printing or remains at the current position of the print job; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15)**, reading the selected job **(i.e. the print jobs have to be read by the system in order to determine their priority and to perform the process of obtaining the print job from the print queue and to transmit the print job to the printer for printing; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15)**, and transmitting the read job to the print processing unit **(i.e. once the print job is reached in the queue, the print job is sent to the printer for printing; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15)**.

Re claim 24: Motamed '969 discloses print system comprising:

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an executing unit adapted for executing printing of a job having a first priority and placed in a queue in preference to another job placed in the queue and having a second priority that is lower than the first priority (**i.e. in Motamed '969, priority printing allows for certain jobs to be placed at a higher priority than others and also allows for those higher priority jobs to be printed before the other jobs. A job having a fastest setting, considered as a job with a first priority, is placed on top of the queue of a printer and printed before a job set as a background job, analogous to a job with a second or lower priority; see figs. 1-4; col. 4, lines 55-67 and col. 5, lines 1-15;**

a proxy unit adapted for executing proxy printing such that a job for the first printer is printed in said second printer in place of the first printer (**i.e. in the system of cluster printing, errors often occur. The system is able to detect these errors and set the print job to be automatically rerouted to another printer, if the first selected printer is unable to print the print job. Therefore, the system performs the feature of the proxy unit above; see figs. 1-4; col. 3, lines 52); and**

when an error is detected in the first printer (**i.e. in column 3, the system discloses errors occurring in the printers involved in printing. When the system detects that the first printer used is in an error state, the job can be rerouted to another printer; see col. 3, ln 35-52).**

However, Motamed '969 fails to teach a group printer driver adapted to process data provided by an application; a despooler adapted to receive the data processed by said group printer driver and transfer the received data to a first PDL driver provided for

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a first printer or a second PDL driver provided for a second printer; a first queue adapted to store, as a job, PDL data generated by the first PDL driver, said first queue being provided for the first printer; a second queue adapted to store, as a job, PDL data generated by the second PDL driver, said second queue being provided for the second printer; a proxy processing unit adapted to move a job stored in said first queue to a second queue so as to execute proxy printing and change the moved job to have a higher priority than another job stored in said second queue, if the moved job has an earlier reception time than that other job.

However, this is well known in the art as evidenced by Kang '993. Kang '993 discloses a first queue adapted to store, as a job, PDL data generated, said first queue being provided for the first printer **(i.e. in the function of Kang, the reference is similar to the reference of Motamed in which jobs can be transferred to an alternative printer. Also, the priority of a job can be raised that is on a certain queue. However, the Kang reference discloses having a first queue that stores a job and this first queue is used to store jobs for an associated printer; see fig. 1; paragraphs [0013]-[0015] and [0048]);**

a second queue adapted to store, as a job, PDL data generated, said second queue being provided for the second printer **(i.e. in the system, there is another queue for a second detected printer that can be used for printing. The second queue connected to an associated printer is used to store a print job that it receives and the associated printer prints the job; paragraphs [0013]-[0015] and [0048]);**

a proxy processing unit adapted to move a job stored in said first queue to a second queue so as to execute proxy printing (**i.e. in the system, a print job can be moved from being stored in a first queue to a second queue in order for printing to be performed on the second printer associated with the second queue; see paragraphs [0033]-[0038]**) and change the moved job to have a higher priority than another job stored in said second queue (**i.e. in the system, once a job is transferred to another queue, the job can be raised to a higher priority than jobs stored on the queue that the transferred job is moved to; see paragraphs [0032]-[0038]**).

Therefore, in view of Kang '993, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of a first queue adapted to store, as a job, PDL data generated, said first queue being provided for the first printer; a second queue adapted to store, as a job, PDL data generated, said second queue being provided for the second printer; a proxy processing unit adapted to move a job stored in said first queue to a second queue so as to execute proxy printing and change the moved job to have a higher priority than another job stored in said second queue, incorporated in the device of Motamed '969, in order to move a print job from one queue to another queue (as stated in Kang '993 paragraph [0013]).

However, the references of Motamed '969 and Kang '993 specifically fail to teach a group printer driver adapted to process data provided by an application; a despooler adapted to receive the data processed by said group printer driver and transfer the received data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer; as a job, PDL data generated by the first PDL driver; and

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as a job, PDL data generated by the second PDL driver, if the moved job has an earlier reception time than that other job.

However, this is well known in the art as evidenced by Kageyama '757.

Kageyama '757 discloses a group printer driver adapted to process data provided by an application (**i.e. in the system, the Kageyama reference is similar to the references of Motamed in which it forwards a job to an alternative printer when an error occurs in a first printer (see col. 17, ln 14-24). Kageyama is also similar to the reference of Kang in the manner in which a print job is transferred from one queue to another queue that is directly associated with a connected printer (see fig. 1). However, the function of Kageyama '757 discloses a printer driver in the PC adapted to process data that is provided by an application in the PC. The data that is from the application is given to a PDL generating unit (7134) that comprises a general PDL that may not be specific to a particular printing device. The PDL generating unit is considered as a group printer driver since it processes data from an application; see col. 24, ln 36-59);**

a despooler adapted to receive the data processed by said group printer driver and transfer the received data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer (**i.e. as seen in figure 4, the print job is sent to the print server (300) where it is received and transferred to a printer driver (7500) that is specific to a certain printer. As shown in the same figure, the job can be forwarded to a first or second printer driver that is able to generate a PDL specific for the associated printer. Shown in column 27, the system**

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**discloses when a job has already been generated in a PDL, but the printer needs to be produced in a format in which the printer can use for printing. The system then converts the previous PDL formatted job into another PDL that is understandable by the current printing device; see fig. 4; col. 17, ln 57 – col. 18, ln 7 and col. 27, ln 55 – col. 28, ln 16);**

**as a job, PDL data generated by the first PDL driver (i.e. in the system, the PDL drivers shown in figure 4 are used to produce a PDL that is recognizable for the printer that uses a language specific to the printer driver. If the system realizes that the job does not contain all the PDL needed to be realized by the printer, a further conversion is performed by the printer driver in the print server in order for the printer to use a current PDL to output the input data; see figs. 4, 13, 56; col. 17, ln 57 – col. 18, ln 7 and col. 27, ln 55 – col. 28, ln 16); and**

**as a job, PDL data generated by the second PDL driver (i.e. the PDL mentioned in the above claim limitation can be also generated from a second printer driver for another language for a printer to use for printing a print job; see figs. 4, 13, 56; col. 17, ln 57 – col. 18, ln 7 and col. 27, ln 55 – col. 28, ln 16).**

Therefore, in view of Kageyama '757, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of having a group printer driver adapted to process data provided by an application; a despooler adapted to receive the data processed by said group printer driver and transfer the received data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer; as a job, PDL data generated by the first PDL driver; and as a job, PDL

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data generated by the second PDL driver, incorporated in the device of Motamed '969, further modified by the features of Kang '963, in order to have a server shift a print job to a spooler for an alternative printer in accordance with an error recovery request (as stated in Kageyama '757 col. 8, ln 17-22).

However, the combination of Motamed '969 in view of Kang '993 and Kageyama '757 fail to teach to have if the moved job has an earlier reception time than that other job.

However, this is well known in the art as evidenced by Abe '792. Abe '792 discloses to have if the moved job has an earlier reception time than that other job (i.e. **the reference of Abe is similar to the reference of Motamed in which different types of jobs can be assigned a certain job priority for printing. Abe '792 is also similar to the reference of Kageyama '757 in which a host computer is used to transfer information to a server and then to a printing device. However, Abe '792 teaches that when the printing system is in non-priority mode, the processing order of print jobs is based on the reception time. With this function incorporated in the combination of Motamed, Kang and Kageyama, the invention is able to not only set a priority for a print job, but also to have the priority of a job that is moved in the previous references to be affected by the feature of the reception time mentioned in the reference of Abe; see col. 11, lines 1-40).**

Therefore, in view of Abe '792, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of to have a higher priority than another job stored in the queue, if the moved job has an earlier reception time than that

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other job incorporated in the system of Motamed '969, modified by the features of Kang '993 and Kageyama '757 disclosed above, in order to determine the processing order of print jobs based on the reception time (as stated in Abe '792 col. 11, lines 1-40).

Re claim 25: The teachings of Motamed '969 in view of Kang '993, Kageyama '757 and Abe '792 are disclosed above.

Motamed '969 discloses a system according to claim 24, wherein said executing unit selects, from among jobs which have not been transmitted to a printer (**i.e. in Motamed '969, the print jobs that are chosen to be executed are selected from jobs that are on the print queue that have not been transmitted to the print engine or printer (51) for actual printing; see figs. 1-4; col. 3, lines 1-67 and col. 4, line 1 - col. 5, line 15 and col. 10, lines 31 – col. 12, lines 36**), a job having a higher priority than others of those jobs (**i.e. in the system of Motamed '969, the system checks the print job setting to see if the priority is the fastest setting or the background setting. Based on the setting, the print job may be placed on the top of the queue for printing or remains at the current position of the print job; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15**), reads the selected job (**i.e. the print jobs have to be read by the system in order to determine their priority and to perform the process of obtaining the print job from the print queue and to transmit the print job to the printer for printing; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15**), and transmits the read job to the first or second printer as the case may be (**i.e. once the print job is reached in the queue,**



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**the print job is sent to the printer for printing; see figs. 1-4; col. 3, lines 1-67 and col. 4, lines 1-67 and col. 5, lines 1-15).**

4. Claims 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motamed '969, as modified by the features of Kang '993, Kageyama '757, and Abe '792, as applied to claims 18, 20, 22 and 24 above, and further in view of Gassho '626 (USP 7180626).

Re claim 26: The teachings of Motamed '969 in view of Kang '993, Kageyama '757 and Abe '792 are disclosed above.

However, Motamed '969 fails to teach an apparatus according to claim 18, wherein, if first and second jobs are stored in the second queue and if the moved job has an later reception time than the first job and has an earlier reception time than the second job, said proxy processing unit changes the moved job to have a higher priority than the second job and to have a lower priority than the first job.

However, this is well known in the art as evidenced by Kang '993. Kang '993 discloses wherein, if first and second jobs are stored in the second queue **(i.e. in the system of Kang '993, a queue can store multiple jobs that are to be printed on an associated printing device. A display that a user utilizes to check the contents of a certain queue shows the user the jobs that may be stored on the queue for a certain printer. The jobs stored on a queue can be considered as first and**

**second jobs on a target queue; see paragraph [0027]) and the moved job (i.e. the invention reveals a job can be moved from one queue to another; see paragraphs [0013]-[0015]).**

Therefore, in view of Kang '993, it would have been obvious to one of ordinary skill at the time the invention was made to have wherein, if first and second jobs are stored in the second queue and if the moved job, incorporated in the device of Motamed '969, as modified by the features Kageyama '757 and Abe '792, in order to move a print job from one queue to another queue (as stated in Kang '993 paragraph [0013]).

However, the combination of Motamed '969 and Kang '993 fail to specifically teach if the moved job has an later reception time than the first job and has an earlier reception time than the second job, said proxy processing step includes changing the moved job to have a higher priority than the second job and to have a lower priority than the first job.

However, this is well known in the art as evidenced by Gassho '626. Gassho '626 discloses wherein, if the moved job has an later reception time than the first job and has an earlier reception time than the second job **(i.e. the moved job can be received by the other queue after the first job and before the second job in the job transferring system; see figs. 4-6; col. 13, lines 18—col. 16, line 33)**, said proxy processing unit changes the moved job to have a higher priority than the second job and to have a lower priority than the first job **(i.e. in the system, if all the same jobs have the same priority, the moment the jobs are received by the second queue,**

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**the print jobs are ordered in the order of when they are received. Also, when taking into account different printing priorities of each print job, a first job can have a highest priority that was already present on the second queue. This would print first if the second job placed on the queue has a standard priority and the moved job has a higher priority. Next, the moved job will print because of the higher priority than a standard priority; see figs. 4-6; col. 13, lines 18—col. 16, line 33).**

Therefore, in view of Gassho '626, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of wherein, if first and second jobs are stored in the second queue and if the moved job has an later reception than the first job and has an earlier reception than the second job, said proxy processing unit changes the moved job to have a higher priority than the second job and to have a lower priority than the first job, incorporated in the device of Motamed '969, as modified by the features of Kang '993, Kageyama '757 and Abe '792, in order to print a job according to priority (as stated in Gassho '626 col. 13, lines 18-36).

Re claim 27: The teachings of Motamed '969 in view of Gassho '626 and Abe '792 are disclosed above.

However, Motamed '969 fails to teach a method according to claim 20, wherein, if first and second jobs are stored in the second queue and if the moved job has an later reception time than the first job and has an earlier reception time than the second job,

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said proxy processing step includes changing the moved job to have a higher priority than the second job and to have a lower priority than the first job.

However, this is well known in the art as evidenced by Kang '993. Kang '993 discloses wherein, if first and second jobs are stored in the second queue **(i.e. in the system of Kang '993, a queue can store multiple jobs that are to be printed on an associated printing device. A display that a user utilizes to check the contents of a certain queue shows the user the jobs that may be stored on the queue for a certain printer. The jobs stored on a queue can be considered as first and second jobs on a target queue; see paragraph [0027])** and the moved job **(i.e. the invention reveals a job can be moved from one queue to another; see paragraphs [0013]-[0015])**.

Therefore, in view of Kang '993, it would have been obvious to one of ordinary skill at the time the invention was made to have wherein, if first and second jobs are stored in the second queue and if the moved job, incorporated in the device of Motamed '969, as modified by the features Kageyama '757 and Abe '792, in order to move a print job from one queue to another queue (as stated in Kang '993 paragraph [0013]).

However, the combination of Motamed '969 and Kang '993 fail to specifically teach if the moved job has an later reception time than the first job and has an earlier reception time than the second job, said proxy processing step includes changing the moved job to have a higher priority than the second job and to have a lower priority than the first job.

However, this is well known in the art as evidenced by Gassho '626. Gassho '626 discloses wherein, if the moved job has an later reception time than the first job and has an earlier reception time than the second job **(i.e. the moved job can be received by the other queue after the first job and before the second job in the job transferring system; see figs. 4-6; col. 13, lines 18—col. 16, line 33)**, said proxy processing step includes changing the moved job to have a higher priority than the second job and to have a lower priority than the first job **(i.e. in the system, if all the same jobs have the same priority, the moment the jobs are received by the second queue, the print job is ordered in the order of when they are received. Also, when taking into account different printing priorities of each print job, a first job can have a highest priority that was already present on the second queue. This would print first if the second job placed on the queue has a standard priority and the moved job has a higher priority. Next, the moved job will print because of the higher priority than a standard priority; see figs. 4-6; col. 13, lines 18—col. 16, line 33).**

Therefore, in view of Gassho '626, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of wherein, if first and second jobs are stored in the second queue and if the moved job has an later reception than the first job and has an earlier reception than the second job, said proxy processing step includes changing the moved job to have a higher priority than the second job and to have a lower priority than the first job, incorporated in the device of Motamed '969, as modified by the features of Kang '993, Kageyama '757 and Abe '792,

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in order to print a job according to priority (as stated in Gassho '626 col. 13, lines 18-36).

Re claim 28: The teachings of Motamed '969 in view of Gassho '626 and Abe '792 are disclosed above.

However, Motamed '969 fails to teach a computer-readable medium according to claim 22, wherein, if first and second jobs are stored in the second queue and if the moved job has an later reception time than the first job and has an earlier reception time than the second job, said proxy processing step includes changing the moved job to have a higher priority than the second job and to have a lower priority than the first job.

However, this is well known in the art as evidenced by Kang '993. Kang '993 discloses wherein, if first and second jobs are stored in the second queue **(i.e. in the system of Kang '993, a queue can store multiple jobs that are to be printed on an associated printing device. A display that a user utilizes to check the contents of a certain queue shows the user the jobs that may be stored on the queue for a certain printer. The jobs stored on a queue can be considered as first and second jobs on a target queue; see paragraph [0027])** and the moved job **(i.e. the invention reveals a job can be moved from one queue to another; see paragraphs [0013]-[0015])**.

Therefore, in view of Kang '993, it would have been obvious to one of ordinary skill at the time the invention was made to have wherein, if first and second jobs are

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stored in the second queue and if the moved job, incorporated in the device of Motamed '969, as modified by the features Kageyama '757 and Abe '792, in order to move a print job from one queue to another queue (as stated in Kang '993 paragraph [0013]).

However, the combination of Motamed '969 and Kang '993 fails to specifically teach if the moved job has an later reception time than the first job and has an earlier reception time than the second job, said proxy processing step includes changing the moved job to have a higher priority than the second job and to have a lower priority than the first job.

However, this is well known in the art as evidenced by Gassho '626. Gassho '626 discloses wherein, if first and second jobs are stored in the second queue (**i.e. in the system of Gassho '626, the second queue can contain any number of print jobs before the transferred job is placed on the second queue; see figs. 4-6; col. 13, lines 18—col. 16, line 33**) and if the moved job has an later reception than the first job and has an earlier reception than the second job (**i.e. the moved job can be received by the other queue after the first job and before the second job in the job transferring system; see figs. 4-6; col. 13, lines 18—col. 16, line 33**), said proxy processing step includes changing the moved job to have a higher priority than the second job and to have a lower priority than the first job (**i.e. in the system, if all the same jobs have the same priority, the moment the jobs are received by the second queue, the print job is ordered in the order of when they are received. Also, when taking into account different printing priorities of each print job, a first job can have a highest priority that was already present on the second queue.**

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**This would print first if the second job placed on the queue has a standard priority and the moved job has a higher priority. Next, the moved job will print because of the higher priority than a standard priority; see figs. 4-6; col. 13, lines 18—col. 16, line 33).**

Therefore, in view of Gassho '626, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of wherein, if first and second jobs are stored in the second queue and if the moved job has an later reception than the first job and has an earlier reception than the second job, said proxy processing step includes changing the moved job to have a higher priority than the second job and to have a lower priority than the first job, incorporated in the device of Motamed '969, as modified by the features of Kang '993, Kageyama '757 and Abe '792, in order to print a job according to priority (as stated in Gassho '626 col. 13, lines 18-36).

Re claim 29: The teachings of Motamed '969 in view of Gassho '626 and Abe '792 are disclosed above.

However, Motamed '969 fails to teach an apparatus according to claim 24, wherein, if first and second jobs are stored in the second queue and if the moved job has an later reception time than the first job and has an earlier reception time than the second job, said proxy processing unit changes the moved job to have a higher priority than the second job and to have a lower priority than the first job.



However, this is well known in the art as evidenced by Kang '993. Kang '993 discloses wherein, if first and second jobs are stored in the second queue **(i.e. in the system of Kang '993, a queue can store multiple jobs that are to be printed on an associated printing device. A display that a user utilizes to check the contents of a certain queue shows the user the jobs that may be stored on the queue for a certain printer. The jobs stored on a queue can be considered as first and second jobs on a target queue; see paragraph [0027])** and the moved job **(i.e. the invention reveals a job can be moved from one queue to another; see paragraphs [0013]-[0015])**.

Therefore, in view of Kang '993, it would have been obvious to one of ordinary skill at the time the invention was made to have wherein, if first and second jobs are stored in the second queue and if the moved job, incorporated in the device of Motamed '969, as modified by the features Kageyama '757 and Abe '792, in order to move a print job from one queue to another queue (as stated in Kang '993 paragraph [0013]).

However, the combination of Motamed '969 and Kang '993 fail to specifically teach if the moved job has an later reception time than the first job and has an earlier reception time than the second job, said proxy processing step includes changing the moved job to have a higher priority than the second job and to have a lower priority than the first job.

However, this is well known in the art as evidenced by Gassho '626. Gassho '626 discloses wherein, if first and second jobs are stored in the second queue **(i.e. in**

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**the system of Gassho '626, the second queue can contain any number of print jobs before the transferred job is placed on the second queue; see figs. 4-6; col. 13, lines 18—col. 16, line 33)** and if the moved job has an later reception than the first job and has an earlier reception than the second job **(i.e. the moved job can be received by the other queue after the first job and before the second job in the job transferring system; see figs. 4-6; col. 13, lines 18—col. 16, line 33)**, said proxy processing unit changes the moved job to have a higher priority than the second job and to have a lower priority than the first job **(i.e. in the system, if all the same jobs have the same priority, the moment the jobs are received by the second queue, the print job is ordered in the order of when they are received. Also, when taking into account different printing priorities of each print job, a first job can have a highest priority that was already present on the second queue. This would print first if the second job placed on the queue has a standard priority and the moved job has a higher priority. Next, the moved job will print because of the higher priority than a standard priority; see figs. 4-6; col. 13, lines 18—col. 16, line 33).**

Therefore, in view of Gassho '626, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of wherein, if first and second jobs are stored in the second queue and if the moved job has an later reception than the first job and has an earlier reception than the second job, said proxy processing unit changes the moved job to have a higher priority than the second job and to have a lower priority than the first job, incorporated in the device of Motamed

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'969, as modified by the features of Kang '993, Kageyama '757 and Abe '792, in order to print a job according to priority (as stated in Gassho '626 col. 13, lines 18-36).

5. Claims 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motamed '969 (USP 7081969) in view of Kang '993 (US Pub 2003/0160993) and Kageyama '757 (USP 5625757).

Re claim 30: Motamed '969 discloses a print control apparatus comprising:

an executing unit adapted to execute printing of a job having a first priority in preference to another job having a second priority that is lower than the first priority (**i.e. in Motamed '969, priority printing allows for certain jobs to be placed at a higher priority than others and also allows for those higher priority jobs to be printed before the other jobs. A job having a fastest setting, considered as a job with a first priority, is placed on top of the queue of a printer and printed before a job set as a background job, analogous to a job with a second or lower priority; see figs. 1-4; col. 4, lines 55-67 and col. 5, lines 1-15); and**

**when an error is detected in the first printer (i.e. in column 3, the system discloses errors occurring in the printers involved in printing. When the system detects that the first printer used is in an error state, the job can be rerouted to another printer; see col. 3, ln 35-52).**

However, Motamed '969 fails to teach a group printer driver adapted to process data provided by an application; a despooler adapted to receive the data processed by said group printer driver and transfer the received data to a first PDL driver provided for

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a first printer or a second PDL driver provided for a second printer; a first queue adapted to store, as a job, PDL data generated by the first PDL driver, said first queue being provided for the first printer; a second queue adapted to store, as a job, PDL data generated by the second PDL driver, said second queue being provided for the second printer; a proxy processing unit adapted to move a job stored in said first queue to said second queue so as to execute proxy printing and change the moved job to have a higher priority than another job stored in said second queue.

However, this is well known in the art as evidenced by Kang '993. Kang '993 discloses a first queue adapted to store, as a job, PDL data generated, said first queue being provided for the first printer **(i.e. in the function of Kang, the reference is similar to the reference of Motamed in which jobs can be transferred to an alternative printer. Also, the priority of a job can be raised that is on a certain queue. However, the Kang reference discloses having a first queue that stores a job and this first queue is used to store jobs for an associated printer; see fig. 1; paragraphs [0013]-[0015] and [0048]);**

a second queue adapted to store, as a job, PDL data generated, said second queue being provided for the second printer **(i.e. in the system, there is another queue for a second detected printer that can be used for printing. The second queue connected to an associated printer is used to store a print job that it receives and the associated printer prints the job; paragraphs [0013]-[0015] and [0048]);**

a proxy processing unit adapted to move a job stored in said first queue to said second queue so as to execute proxy printing (**i.e. in the system, a print job can be moved from being stored in a first queue to a second queue in order for printing to be performed on the second printer associated with the second queue; see paragraphs [0033]-[0038]**) and change the moved job to have a higher priority than another job stored in said second queue (**i.e. in the system, once a job is transferred to another queue, the job can be raised to a higher priority than jobs stored on the queue that the transferred job is moved to; see paragraphs [0032]-[0038]**).

Therefore, in view of Kang '993, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of a first queue adapted to store, as a job, PDL data generated, said first queue being provided for the first printer; a second queue adapted to store, as a job, PDL data generated, said second queue being provided for the second printer; a proxy processing unit adapted to move a job stored in said first queue to said second queue so as to execute proxy printing and change the moved job to have a higher priority than another job stored in said second queue, incorporated in the device of Motamed '969, in order to move a print job from one queue to another queue (as stated in Kang '993 paragraph [0013]).

However, the references of Motamed '969 and Kang '993 specifically fail to teach a group printer driver adapted to process data provided by an application; a despooler adapted to receive the data processed by said group printer driver and transfer the received data to a first PDL driver provided for a first printer or a second PDL driver

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provided for a second printer; as a job, PDL data generated by the first PDL driver; and as a job, PDL data generated by the second PDL driver.

However, this is well known in the art as evidenced by Kageyama '757.

Kageyama '757 discloses a group printer driver adapted to process data provided by an application (**i.e. in the system, the Kageyama reference is similar to the references of Motamed in which it forwards a job to an alternative printer when an error occurs in a first printer (see col. 17, ln 14-24). Kageyama is also similar to the reference of Kang in the manner in which a print job is transferred from one queue to another queue that is directly associated with a connected printer (see fig. 1). However, the function of Kageyama '757 discloses a printer driver in the PC adapted to process data that is provided by an application in the PC. The data that is from the application is given to a PDL generating unit (7134) that comprises a general PDL that may not be specific to a particular printing device. The PDL generating unit is considered as a group printer driver since it processes data from an application; see col. 24, ln 36-59);**

a despooler adapted to receive the data processed by said group printer driver and transfer the received data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer (**i.e. as seen in figure 4, the print job is sent to the print server (300) where it is received and transferred to a printer driver (7500) that is specific to a certain printer. As shown in the same figure, the job can be forwarded to a first or second printer driver that is able to generate a PDL specific for the associated printer. Shown in column 27, the system**

**discloses when a job has already been generated in a PDL, but the printer needs to be produced in a format in which the printer can use for printing. The system then converts the previous PDL formatted job into another PDL that is understandable by the current printing device; see fig. 4; col. 17, ln 57 – col. 18, ln 7 and col. 27, ln 55 – col. 28, ln 16);**

**as a job, PDL data generated by the first PDL driver (i.e. in the system, the PDL drivers shown in figure 4 are used to produce a PDL that is recognizable for the printer that uses a language specific to the printer driver. If the system realizes that the job does not contain all the PDL needed to be realized by the printer, a further conversion is performed by the printer driver in the print server in order for the printer to use a current PDL to output the input data; see figs. 4, 13, 56; col. 17, ln 57 – col. 18, ln 7 and col. 27, ln 55 – col. 28, ln 16); and**

**as a job, PDL data generated by the second PDL driver (i.e. the PDL mentioned in the above claim limitation can be also generated from a second printer driver for another language for a printer to use for printing a print job; see figs. 4, 13, 56; col. 17, ln 57 – col. 18, ln 7 and col. 27, ln 55 – col. 28, ln 16).**

Therefore, in view of Kageyama '757, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of having a group printer driver adapted to process data provided by an application; a despooler adapted to receive the data processed by said group printer driver and transfer the received data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer; as a job, PDL data generated by the first PDL driver; and as a job, PDL

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data generated by the second PDL driver, incorporated in the device of Motamed '969, further modified by the features of Kang '963, in order to have a server shift a print job to a spooler for an alternative printer in accordance with an error recovery request (as stated in Kageyama '757 col. 8, ln 17-22).

Re claim 31: Motamed '969 discloses a print control method carried out in a print control apparatus that comprises

said method comprising:

an executing step, of executing printing of a job having a first priority in preference to a job having a second priority that is lower than the first priority (**i.e. in Motamed '969, priority printing allows for certain jobs to be placed at a higher priority than others and also allows for those higher priority jobs to be printed before the other jobs. A job having a fastest setting, considered as a job with a first priority, is placed on top of the queue of a printer and printed before a job set as a background job, analogous to a job with a second or lower priority; see figs. 1-4; col. 4, lines 55-67 and col. 5, lines 1-15); and**

**when an error is detected in the first printer (i.e. in column 3, the system discloses errors occurring in the printers involved in printing. When the system detects that the first printer used is in an error state, the job can be rerouted to another printer; see col. 3, ln 35-52).**

However, Motamed '969 fails to teach a group printer driver which processes data provided by an application; a despooler which receives the data processed by the



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group printer driver and transfers the received data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer; a first queue which is provided for the first printer and stores, as a job, PDL data generated by the first PDL driver, and; a second queue which is provided for the first printer and stores, as a job, PDL data generated by the second PDL driver; a proxy processing step of moving a job stored in the first queue to the second queue so as to execute proxy printing and changing the moved job to have a higher priority than another job stored in the second queue.

However, this is well known in the art as evidenced by Kang '993. Kang '993 discloses a first queue which is provided for the first printer and stores, as a job, PDL data generated **(i.e. in the function of Kang, the reference is similar to the reference of Motamed in which jobs can be transferred to an alternative printer. Also, the priority of a job can be raised that is on a certain queue. However, the Kang reference discloses having a first queue that stores a job and this first queue is used to store jobs for an associated printer; see fig. 1; paragraphs [0013]-[0015] and [0048]); and**

a second queue which is provided for the first printer and stores, as a job, PDL data generated **(i.e. in the system, there is another queue for a second detected printer that can be used for printing. The second queue connected to an associated printer is used to store a print job that it receives and the associated printer prints the job; paragraphs [0013]-[0015] and [0048]);**

a proxy processing step of moving a job stored in the first queue to the second queue so as to execute proxy printing (**i.e. in the system, a print job can be moved from being stored in a first queue to a second queue in order for printing to be performed on the second printer associated with the second queue; see paragraphs [0033]-[0038]**) and changing the moved job to have a higher priority than another job stored in the second queue (**i.e. in the system, once a job is transferred to another queue, the job can be raised to a higher priority than jobs stored on the queue that the transferred job is moved to; see paragraphs [0032]-[0038]**).

Therefore, in view of Kang '993, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of a first queue which is provided for the first printer and stores, as a job, PDL data generated; and a second queue which is provided for the first printer and stores, as a job, PDL data generated; a proxy processing step of moving a job stored in the first queue to the second queue so as to execute proxy printing and changing the moved job to have a higher priority than another job stored in the second queue, incorporated in the device of Motamed '969, in order to move a print job from one queue to another queue (as stated in Kang '993 paragraph [0013]).

However, the references of Motamed '969 and Kang '993 specifically fail to teach a group printer driver which processes data provided by an application; a despooler which receives the data processed by the group printer driver and transfers the received data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer; as a job, PDL data generated by the first PDL driver; and as a job,

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PDL data generated by the second PDL driver, if the moved job has an earlier reception time than that other job.

However, this is well known in the art as evidenced by Kageyama '757.

Kageyama '757 discloses a group printer driver which processes data provided by an application (**i.e. in the system, the Kageyama reference is similar to the references of Motamed in which it forwards a job to an alternative printer when an error occurs in a first printer (see col. 17, ln 14-24). Kageyama is also similar to the reference of Kang in the manner in which a print job is transferred from one queue to another queue that is directly associated with a connected printer (see fig. 1). However, the function of Kageyama '757 discloses a printer driver in the PC adapted to process data that is provided by an application in the PC. The data that is from the application is given to a PDL generating unit (7134) that comprises a general PDL that may not be specific to a particular printing device. The PDL generating unit is considered as a group printer driver since it processes data from an application; see col. 24, ln 36-59);**

a despooler which receives the data processed by the group printer driver and transfers the received data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer (**i.e. as seen in figure 4, the print job is sent to the print server (300) where it is received and transferred to a printer driver (7500) that is specific to a certain printer. As shown in the same figure, the job can be forwarded to a first or second printer driver that is able to generate a PDL specific for the associated printer. Shown in column 27, the system discloses**

**when a job has already been generated in a PDL, but the printer needs to be produced in a format in which the printer can use for printing. The system then converts the previous PDL formatted job into another PDL that is understandable by the current printing device; see fig. 4; col. 17, ln 57 – col. 18, ln 7 and col. 27, ln 55 – col. 28, ln 16);**

**as a job, PDL data generated by the first PDL driver (i.e. in the system, the PDL drivers shown in figure 4 are used to produce a PDL that is recognizable for the printer that uses a language specific to the printer driver. If the system realizes that the job does not contain all the PDL needed to be realized by the printer, a further conversion is performed by the printer driver in the print server in order for the printer to use a current PDL to output the input data; see figs. 4, 13, 56; col. 17, ln 57 – col. 18, ln 7 and col. 27, ln 55 – col. 28, ln 16); and**

**as a job, PDL data generated by the second PDL driver (i.e. the PDL mentioned in the above claim limitation can be also generated from a second printer driver for another language for a printer to use for printing a print job; see figs. 4, 13, 56; col. 17, ln 57 – col. 18, ln 7 and col. 27, ln 55 – col. 28, ln 16).**

Therefore, in view of Kageyama '757, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of having a group printer driver which processes data provided by an application; a despooler which receives the data processed by the group printer driver and transfers the received data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer; as a job, PDL data generated by the first PDL driver; and as a job, PDL

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data generated by the second PDL driver, incorporated in the device of Motamed '969, further modified by the features of Kang '963, in order to have a server shift a print job to a spooler for an alternative printer in accordance with an error recovery request (as stated in Kageyama '757 col. 8, ln 17-22).

Re claim 32: Motamed '969 discloses computer readable storage medium storing a program that causes a computer to execute a print control method (see load balancing module; col. 2, lines 39-44), carried out in a print control apparatus which comprises

said method comprising:

an executing step, of executing printing of a job having a first priority in preference to a job having a second priority that is lower than the first priority (**i.e. in Motamed '969, priority printing allows for certain jobs to be placed at a higher priority than others and also allows for those higher priority jobs to be printed before the other jobs. A job having a fastest setting, considered as a job with a first priority, is placed on top of the queue of a printer and printed before a job set as a background job, analogous to a job with a second or lower priority; see figs. 1-4; col. 4, lines 55-67 and col. 5, lines 1-15)**

when an error is detected in the first printer (**i.e. in column 3, the system discloses errors occurring in the printers involved in printing. When the system detects that the first printer used is in an error state, the job can be rerouted to another printer; see col. 3, ln 35-52).**

However, Motamed '969 fails to teach a group printer driver which processes data provided by an application; a despooler which receives the data processed by the group printer driver and transfers the received data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer; a first queue which is provided for the first printer and stores, as a job, PDL data generated by the first PDL driver, and; a second queue which is provided for the first printer and stores, as a job, PDL data generated by the second PDL driver; a proxy processing step of moving a job stored in the first queue to the second queue so as to execute proxy printing and changing the moved job to have a higher priority than another job stored in the second queue.

However, this is well known in the art as evidenced by Kang '993. Kang '993 discloses a first queue which is provided for the first printer and stores, as a job, PDL data generated **(i.e. in the function of Kang, the reference is similar to the reference of Motamed in which jobs can be transferred to an alternative printer. Also, the priority of a job can be raised that is on a certain queue. However, the Kang reference discloses having a first queue that stores a job and this first queue is used to store jobs for an associated printer; see fig. 1; paragraphs [0013]-[0015] and [0048]); and**

a second queue which is provided for the first printer and stores, as a job, PDL data generated **(i.e. in the system, there is another queue for a second detected printer that can be used for printing. The second queue connected to an**

**associated printer is used to store a print job that it receives and the associated printer prints the job; paragraphs [0013]-[0015] and [0048]);**

a proxy processing step of moving a job stored in the first queue to the second queue so as to execute proxy printing (**i.e. in the system, a print job can be moved from being stored in a first queue to a second queue in order for printing to be performed on the second printer associated with the second queue; see paragraphs [0033]-[0038])** and changing the moved job to have a higher priority than another job stored in the second queue (**i.e. in the system, once a job is transferred to another queue, the job can be raised to a higher priority than jobs stored on the queue that the transferred job is moved to; see paragraphs [0032]-[0038]).**

Therefore, in view of Kang '993, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of a first queue which is provided for the first printer and stores, as a job, PDL data generated; and a second queue which is provided for the first printer and stores, as a job, PDL data generated; a proxy processing step of moving a job stored in the first queue to the second queue so as to execute proxy printing and changing the moved job to have a higher priority than another job stored in the second queue, incorporated in the device of Motamed '969, in order to move a print job from one queue to another queue (as stated in Kang '993 paragraph [0013]).

However, the references of Motamed '969 and Kang '993 specifically fail to teach a group printer driver which processes data provided by an application; a despooler which receives the data processed by the group printer driver and transfers the received

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data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer; as a job, PDL data generated by the first PDL driver; and as a job, PDL data generated by the second PDL driver, if the moved job has an earlier reception time than that other job.

However, this is well known in the art as evidenced by Kageyama '757.

Kageyama '757 discloses a group printer driver which processes data provided by an application (i.e. **in the system, the Kageyama reference is similar to the references of Motamed in which it forwards a job to an alternative printer when an error occurs in a first printer (see col. 17, ln 14-24). Kageyama is also similar to the reference of Kang in the manner in which a print job is transferred from one queue to another queue that is directly associated with a connected printer (see fig. 1). However, the function of Kageyama '757 discloses a printer driver in the PC adapted to process data that is provided by an application in the PC. The data that is from the application is given to a PDL generating unit (7134) that comprises a general PDL that may not be specific to a particular printing device. The PDL generating unit is considered as a group printer driver since it processes data from an application; see col. 24, ln 36-59);**

a despooler which receives the data processed by the group printer driver and transfers the received data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer (i.e. **as seen in figure 4, the print job is sent to the print server (300) where it is received and transferred to a printer driver (7500) that is specific to a certain printer. As shown in the same figure, the job**



**can be forwarded to a first or second printer driver that is able to generate a PDL specific for the associated printer. Shown in column 27, the system discloses when a job has already been generated in a PDL, but the printer needs to be produced in a format in which the printer can use for printing. The system then converts the previous PDL formatted job into another PDL that is understandable by the current printing device; see fig. 4; col. 17, ln 57 – col. 18, ln 7 and col. 27, ln 55 – col. 28, ln 16);**

**as a job, PDL data generated by the first PDL driver (i.e. in the system, the PDL drivers shown in figure 4 are used to produce a PDL that is recognizable for the printer that uses a language specific to the printer driver. If the system realizes that the job does not contain all the PDL needed to be realized by the printer, a further conversion is performed by the printer driver in the print server in order for the printer to use a current PDL to output the input data; see figs. 4, 13, 56; col. 17, ln 57 – col. 18, ln 7 and col. 27, ln 55 – col. 28, ln 16); and**

**as a job, PDL data generated by the second PDL driver (i.e. the PDL mentioned in the above claim limitation can be also generated from a second printer driver for another language for a printer to use for printing a print job; see figs. 4, 13, 56; col. 17, ln 57 – col. 18, ln 7 and col. 27, ln 55 – col. 28, ln 16).**

Therefore, in view of Kageyama '757, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of having a group printer driver which processes data provided by an application; a despooler which receives the data processed by the group printer driver and transfers the received data

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to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer; as a job, PDL data generated by the first PDL driver; and as a job, PDL data generated by the second PDL driver, incorporated in the device of Motamed '969, further modified by the features of Kang '963, in order to have a server shift a print job to a spooler for an alternative printer in accordance with an error recovery request (as stated in Kageyama '757 col. 8, ln 17-22).

Re claim 33: Motamed '969 discloses a print control system comprising:

an executing unit adapted to execute printing of a job having a first priority in preference to another job having a second priority that is lower than the first priority (**i.e. in Motamed '969, priority printing allows for certain jobs to be placed at a higher priority than others and also allows for those higher priority jobs to be printed before the other jobs. A job having a fastest setting, considered as a job with a first priority, is placed on top of the queue of a printer and printed before a job set as a background job, analogous to a job with a second or lower priority; see figs. 1-4; col. 4, lines 55-67 and col. 5, lines 1-15); and**

**when an error is detected in the first printer (i.e. in column 3, the system discloses errors occurring in the printers involved in printing. When the system detects that the first printer used is in an error state, the job can be rerouted to another printer; see col. 3, ln 35-52).**

However, Motamed '969 fails to teach a group printer driver adapted to process data provided by an application; a despooler adapted to receive the data processed by

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said group printer driver and transfer the received data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer; a first queue adapted to store, as a job, PDL data generated by the first PDL driver, said first queue being provided for the first printer; a second queue adapted to store, as a job, PDL data generated by the second PDL driver, said second queue being provided for the second printer; a proxy processing unit adapted to move a job stored in said first queue to said second queue so as to execute proxy printing and change the moved job to have a higher priority than another job stored in said second queue.

However, this is well known in the art as evidenced by Kang '993. Kang '993 discloses a first queue adapted to store, as a job, PDL data generated, said first queue being provided for the first printer **(i.e. in the function of Kang, the reference is similar to the reference of Motamed in which jobs can be transferred to an alternative printer. Also, the priority of a job can be raised that is on a certain queue. However, the Kang reference discloses having a first queue that stores a job and this first queue is used to store jobs for an associated printer; see fig. 1; paragraphs [0013]-[0015] and [0048]);**

a second queue adapted to store, as a job, PDL data generated, said second queue being provided for the second printer **(i.e. in the system, there is another queue for a second detected printer that can be used for printing. The second queue connected to an associated printer is used to store a print job that it receives and the associated printer prints the job; paragraphs [0013]-[0015] and [0048]);**

a proxy processing unit adapted to move a job stored in said first queue to said second queue so as to execute proxy printing (**i.e. in the system, a print job can be moved from being stored in a first queue to a second queue in order for printing to be performed on the second printer associated with the second queue; see paragraphs [0033]-[0038]**) and change the moved job to have a higher priority than another job stored in said second queue (**i.e. in the system, once a job is transferred to another queue, the job can be raised to a higher priority than jobs stored on the queue that the transferred job is moved to; see paragraphs [0032]-[0038]**).

Therefore, in view of Kang '993, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of a first queue adapted to store, as a job, PDL data generated, said first queue being provided for the first printer; a second queue adapted to store, as a job, PDL data generated, said second queue being provided for the second printer; a proxy processing unit adapted to move a job stored in said first queue to said second queue so as to execute proxy printing and change the moved job to have a higher priority than another job stored in said second queue, incorporated in the device of Motamed '969, in order to move a print job from one queue to another queue (as stated in Kang '993 paragraph [0013]).

However, the references of Motamed '969 and Kang '993 specifically fail to teach a group printer driver adapted to process data provided by an application; a despooler adapted to receive the data processed by said group printer driver and transfer the received data to a first PDL driver provided for a first printer or a second PDL driver

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provided for a second printer; as a job, PDL data generated by the first PDL driver; and as a job, PDL data generated by the second PDL driver.

However, this is well known in the art as evidenced by Kageyama '757.

Kageyama '757 discloses a group printer driver adapted to process data provided by an application (**i.e. in the system, the Kageyama reference is similar to the references of Motamed in which it forwards a job to an alternative printer when an error occurs in a first printer (see col. 17, ln 14-24). Kageyama is also similar to the reference of Kang in the manner in which a print job is transferred from one queue to another queue that is directly associated with a connected printer (see fig. 1). However, the function of Kageyama '757 discloses a printer driver in the PC adapted to process data that is provided by an application in the PC. The data that is from the application is given to a PDL generating unit (7134) that comprises a general PDL that may not be specific to a particular printing device. The PDL generating unit is considered as a group printer driver since it processes data from an application; see col. 24, ln 36-59);**

a despooler adapted to receive the data processed by said group printer driver and transfer the received data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer (**i.e. as seen in figure 4, the print job is sent to the print server (300) where it is received and transferred to a printer driver (7500) that is specific to a certain printer. As shown in the same figure, the job can be forwarded to a first or second printer driver that is able to generate a PDL specific for the associated printer. Shown in column 27, the system**

**discloses when a job has already been generated in a PDL, but the printer needs to be produced in a format in which the printer can use for printing. The system then converts the previous PDL formatted job into another PDL that is understandable by the current printing device; see fig. 4; col. 17, ln 57 – col. 18, ln 7 and col. 27, ln 55 – col. 28, ln 16);**

**as a job, PDL data generated by the first PDL driver (i.e. in the system, the PDL drivers shown in figure 4 are used to produce a PDL that is recognizable for the printer that uses a language specific to the printer driver. If the system realizes that the job does not contain all the PDL needed to be realized by the printer, a further conversion is performed by the printer driver in the print server in order for the printer to use a current PDL to output the input data; see figs. 4, 13, 56; col. 17, ln 57 – col. 18, ln 7 and col. 27, ln 55 – col. 28, ln 16); and**

**as a job, PDL data generated by the second PDL driver (i.e. the PDL mentioned in the above claim limitation can be also generated from a second printer driver for another language for a printer to use for printing a print job; see figs. 4, 13, 56; col. 17, ln 57 – col. 18, ln 7 and col. 27, ln 55 – col. 28, ln 16).**

Therefore, in view of Kageyama '757, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of having a group printer driver adapted to process data provided by an application; a despooler adapted to receive the data processed by said group printer driver and transfer the received data to a first PDL driver provided for a first printer or a second PDL driver provided for a second printer; as a job, PDL data generated by the first PDL driver; and as a job, PDL

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data generated by the second PDL driver, incorporated in the device of Motamed '969, further modified by the features of Kang '963, in order to have a server shift a print job to a spooler for an alternative printer in accordance with an error recovery request (as stated in Kageyama '757 col. 8, ln 17-22).

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
7. Salgado (USP 6504621) discloses a system for managing resource deficient jobs in a multifunctional printing system.
8. Yellepeddy (USP 6288790) discloses transient and remote printing queues that transfer jobs between the two queues.
9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAD DICKERSON whose telephone number is (571)270-1351. The examiner can normally be reached on Mon. thru Thur. 9:00-6:30 Fri. 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Haskins can be reached on (571)-272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. D./  
/Chad Dickerson/  
Examiner, Art Unit 2625

/Twyler L. Haskins/  
Supervisory Patent Examiner, Art Unit 2625